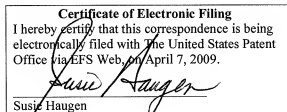


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Maurice Eduardus Theodorus van Esbroeck
Application No. : 09/865,180
For : **Adding an Additive to a Meat Product**
Filed : May 24, 2001
Examiner : Laura Estelle Edwards
Art Unit : 1792

Client/Matter: V0028-258606

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



CORRECTED APPEAL BRIEF

Sir or Madam:

This is a Corrected Appeal Brief filed under 37 C.F.R. § 41.37 in connection with the final rejection of claims 30-34, 61-65, 67, 69, 70, 72, 73 and 75-80 in the Final Office Action mailed July 1, 2008. Correction of the original appeal brief, filed December 18, 2008, was requested in the Examiner's March 10, 2009 Notification of Non-Compliant Appeal Brief. Each of the topics required by 37 C.F.R. § 41.37 and requested by the Examiner are presented herewith and labeled appropriately.

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Real Party in Interest

The real party in interest in the present application is the assignee, Stork PMT B.V.,
Handelstraat 3, 5831AV Boxmeer, The Netherlands (hereinafter "Applicant").

Related Appeals and Interferences

Applicant knows of no other appeals or interferences related to the present application.

Status of Claims

Claims 30-34, 61-65, 67, 69, 70, 72, 73 and 75-80 stood finally rejected in the Final Office Action mailed July 1, 2008. Applicant cancelled claims 1-29, 35-60, 66, 68, 71 and 74 during prosecution. Applicant cancelled claims 31-34, 61, 62, 67, 69, 70, 73, 75, 76, 79 and 80 in the Amendment After Final Rejection filed concurrently herewith and confirmed that claims 1-29, 35-60, 66, 68, 71 and 74 had been previously cancelled. Claims 30, 63-65, 72 and 77-78 are addressed herein.

Status of Amendments

Applicant filed an Amendment After Final Rejection concurrently herewith cancelling claims 31-34, 61, 62, 67, 69, 70, 73, 75, 76, 79 and 80 and confirming that claims 1-29, 35-60, 66, 68, 71 and 74 had been previously cancelled.

Summary of the Claimed Subject Matter

Claims 30 and 77 are the only pending independent claims.

The Claims on appeal describe a device for applying multiple coatings of different marinades in overlapping layers onto meat products. *See* Specification, p. 5, lines 18-22, lines 16-22. The device includes a conveyor device with a plurality of meat product holders wherein meat products may be rotated about a vertical rotation axis. *See* Specification, p. 5, lines 18-22, p. 11, lines 19-25, p. 12, line 24-p. 13, line 6. The device includes a plurality of marinade application stations wherein the meat products sequentially pass the marinade application stations. *See* Specification, p. 5, lines 3-13, p. 13, lines 22-30. The device, thus, may apply different marinades to the meat products. *See* Specification, p. 13, lines 16-21.

Claim 30 recites a device in which the conveyor device includes a track and a plurality of meat product holders. *See* Specification, p. 11, lines 19-25. The meat holders, which are displaceable along the track, each comprise a rotary member adapted to rotate the meat product about a vertical axis. *See* Specification, p. 11, lines 19-25, p. 12, line 34- p. 13, line 6. Claim 30 further includes a plurality of marinade stations positioned one behind another along the track, so that meat products sequentially pass along the marinade application stations. *See* Specification, p. 13, lines 16-22. At least one of the marinade application stations is adapted to apply a different marinade than other marinade application stations. *See* Specification, p. 13, lines 16-22. Further, at least one marinade application station comprises at least one nozzle for emitting at least one jet of at least one marinade. *See* Specification p. 12, lines 8-10, p. 12, line 34-p. 13, line 6. The marinade application stations are adapted to apply marinade onto meat products conveyed by the conveyor device and rotated about a vertical axis by the meat product holder to

uniformly coat the outer surface of the meat product with overlapping layers of different marinades. *See* Specification, p. 12, line 34- p. 13, line 6, p. 13, lines 16-22. .

In one embodiment, Claim 30 further includes shielding means to substantially shield non-selected portions of the outer surfaces of meat products from at least one marinade. (Claim 63). *See* Specification, p. 10, lines 30- p. 11, line 11. Structure corresponding to such shielding means includes electrically conductive shields arranged between the jet nozzle(s) and the part which is to be shielded *See* Specification, p. 10, lines 30- p. 11, line 11.

In another embodiment, Claim 30 further includes analyzing means for analyzing the meat product after the marinade coating. (Claim 64). *See* Specification, p. 18, lines 1-13. Structure corresponding to such analyzing means includes a camera (Claim 65). *See* Specification, p. 18, lines 1-13.

In yet another embodiment, the marinade application station of Claim 30 further includes means for generating a gas flow (Claim 72). *See* Specification, p. 8, line 34- p. 9, line 6. Structure corresponding to such means for generating a gas flow includes portions of the additive-application station. *See* Specification, p. 8, line 34- p. 9, line 6.

Claim 77 recites a device in which the conveyor device includes a track and a plurality of meat product holders adapted to hold meat products suspended downwardly. *See* Specification, p. 11, lines 19-25. The meat holders, which are displaceable along the track, each comprise a rotary member adapted to rotate the meat product about a vertical axis. *See* Specification, p. 11, lines 19-25, p. 12, line 34- p. 13, line 6. Claim 77 further includes a plurality of marinade stations positioned one behind another along the track, so that meat products sequentially pass along the marinade application stations. *See* Specification, p. 13, lines 16-22. At least one of the marinade application stations is adapted to apply a different marinade than other marinade

application stations and the marinade application stations may apply different marinades successively to the outer surface of the meat product. *See* Specification, p. 13, lines 16-22. Further, at least one marinade application station comprises at least one nozzle for emitting at least one jet of at least one marinade. *See* Specification, p. 12, lines 8-10, p. 12, line 34- p. 13, line 6. The marinade application stations are adapted to apply marinade onto meat products conveyed by the conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades. *See* Specification, p. 12, line 34- p. 13, line 6, p. 13, lines 16-22. .

In one embodiment, the marinade application station of Claim 77 further includes means for generating a gas flow (Claim 78). *See* Specification, p. 8, line 34- p. 9, line 6. Structure corresponding to such means for generating a gas flow includes portions of the additive-application station. *See* Specification, p. 8, line 34- p. 9, line 6.

The above description of the claimed subject matter is intended to provide the reader with an overview of embodiments of the present invention, but is not intended to in any way limit the scope of the claimed invention.

Grounds of Rejection to be Reviewed on Appeal

The Examiner rejected claims 30, 61, 67, 69, 70, 73, 75 and 76 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563). The Examiner rejected claims 31-33 and 62 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Muschany (U.S. 4,627,007). The Examiner rejected claim 34 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Evans (U.S. 6,010,726). The Examiner rejected claims 63 and 72 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Vincent (GB 2,177,585). The Examiner rejected claims 64 and 65 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Newman (U.S. 5,668,634) or Gorl (U.S. Patent 4,413,279). The Examiner rejected claim 77 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524). The Examiner rejected claim 78 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524) as applied to claim 77 and further in view of Vincent (GB 2,177,585). The Examiner rejected claims 79 and 80 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671), Ludwig

(U.S. Patent 5,449,524) and Evans (U.S. 6,010,726). The issues presented for consideration in this appeal are as follows:

1. Whether the Examiner erred in rejecting claim 30 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563);

2. Whether the Examiner erred in rejecting claims 63 and 72 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Vincent (GB 2,177,585);

3. Whether the Examiner erred in rejecting claims 64 and 65 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Newman (U.S. 5,668,634) or Gorl (U.S. Patent 4,413,279);

4. Whether the Examiner erred in rejecting claim 77 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524); and

5. Whether the Examiner erred in rejecting claim 78 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524) as applied to claim 77 and further in view of Vincent (GB 2,177,585).

Argument

The Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex*, MPEP § 2141, explain what is required where an obviousness rejection is made:

As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deer Co.* Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the difference between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. . . .

Office personnel fulfill the critical role of fact finder when resolving the *Graham* inquiries. . . . Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. . . .

Once the findings of fact are articulated, Office personnel must provide an explanation to support an obviousness rejection under 35 U.S.C 103.

The Examiner's rejections do not comply with these requirements.

For the reasons explained in detail below and with specific reference to the Examiner's rejections, none of the references cited by the Examiner, nor any other relevant prior art of record, singly or in combination, discloses each and every element of the appealed claims.

Issue 1: Whether the Examiner erred in rejecting claim 30 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563):

Applicant respectfully traverses the rejection of claim under 35 U.S.C. 103(a). Neither Dew, Janssen, Ludwig nor Snowden, nor any other relevant prior art of record, singly or in combination, discloses each and every element of the appealed claims. Specifically, no references disclose a device for applying multiple coatings of different marinades in overlapping layers wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, “obviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). Moreover, as the Supreme Court recently stated, “*there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (emphasis added))

Dew teaches a method for processing food products by spraying them with atomized water in an electric field. If desired, the water can include additives for example to preserve, to

color or to flavor of the food product. Dew refers to all sorts of food products. Col.3, lines 45-61. In this respect Dew refers to all sorts of suitable means for conveying the food products in Col 5, lines 12-22. For poultry, Dew discloses that the food products are carried by shackles connected to a conveyor chain 4. Col. 5, lines 53-54. Although Dew suggests that “any type” of conveyor can be used, there is no teaching of a conveyor for holding a meat product which is rotatable about its vertical axis; nor is there teaching of a device wherein the meat product is rotated about the vertical axis by the meat product holder while marinade is being apply to allow the product to be *uniformly* coated with overlapping layers of different marinades. Rather, Dew discloses a device wherein the two sides of the meat product facing the spray likely receive a greater concentration of additives than those portions of the meat product positioned parallel to the sprays. Regardless, the device of Dew does not provide for the uniform coating of layers as recited by claim 30. Moreover, Dew does not disclose the use of marinade application stations positioned one behind another and the use of different marinades as recited by claim 30.

Ludwig teaches the needle injection of solutions into *different portions* of poultry carcasses carried by a transport belt. The portions of the carcass making contact with the belt are not, and indeed can not, be treated by the Ludwig device. Further, Ludwig teaches a device which requires *greater concentrations of injected solution in certain regions of the carcass and lesser concentrations of injected solution at other portions of the carcass*. Ludwig, Col. 2, lines 30-33.

It would not have been obvious to combine the Dew and Ludwig references as suggested by the Examiner. Ludwig is related solely to injecting a carcass with a solution whereas Dew is related to the application of a solution through spray. Ludwig teaches treatment of the interior of the carcass whereas Dew teaches treatment of the exterior. To one of ordinary skill in the art,

these two techniques are totally distinct and techniques which, in fact, require distinct equipment. One of ordinary skill in the art considering Dew, and wishing to provide for the application of different marinades to the exterior of a carcass, would not look to Ludwig and its injection techniques. Even if Ludwig was in fact considered, however, one of ordinary skill certainly would not retain the sequential treatment with different marinade features of Ludwig and the application technique of Dew. A conclusion of obviousness based on the combination of Dew and Ludwig is only available when based on improper hindsight reasoning.

In addition, it would not have been obvious to combine the Dew and Ludwig references because the combination actually renders the prior art unsatisfactory for its intended purpose. *See* MPEP 2143.01. In order to modify Dew to render the claimed invention obvious, the nozzles of Dew would have to be placed in consecutive marinade applications stations wherein at least one of the marinades of the marinade stations differed from the rest of the stations. This would result in a carcass first being treated with a water spray containing one marinade and then treated with a water spray containing a different marinade. But the application of such water-based sprays in two consecutive steps would actually result in the removal of the first marinade spray by the application of the second. Thus, the combination of Dew and Ludwig would render at least Ludwig, which teaches the treatment of a carcass with different solutions (attainable in Ludwig through injection), unsuitable for its intended purpose.

Ludwig clearly teaches away from the instant invention wherein the meat product is rotated about the vertical axis by the meat product holder while marinade is being applied to allow the product to be uniformly coated with overlapping layers of different marinades. Rotation while applying marinade through injection is impossible. Again, Ludwig is not properly used combined with Dew in an obviousness rejection.

Janssen teaches the use of a carrier which is rotatable through a predetermined angle on a vertical axis. Page 5, lines 21-22. Nothing in Janssen discloses a carrier which is fully rotatable about its vertical axis, which rotation would be necessary in order to meet the limitation that the outer surface of meat products are “uniformly coat[ed]. . . with overlapping layers of different marinades.” Rather, Janssen teaches that the rotation of the carrier 6 is determined by the interaction between a segment of the Maltese Cross 18, and also by angular orientation fixing means present in the connecting means 8. Page 6, line 37- Page 7, line 8. Janssen discloses a conveyor device in which rotary meat product holders are utilized, however it does not include any teaching of marinade is being applied to allow the product to be uniformly coated with overlapping layers of different marinades.

The Action includes Snowden as purportedly teaching the use of a nozzle to provide uniform overlapping sprays of fluid. But Snowden, in fact, also teaches away from a uniform spray. At several instances, Snowden states the importance of keeping the back of the meat product in a fixed position so that it receives the brunt of the treatment of the sprayers. See, for example, Col. 2, lines 70-75 (“A bar extends through the housing for maintaining the fowl supported by the conveyor such that back portions of the fowl are directed towards the divider structure for reception of the hottest temperature steam during travel though the predetermined path.”); Col. 5, lines 2-7 (“An extremely important function of the pipe is to bear against the shackles to prevent the shackles from pivoting while traveling along the path of the conveyor, so that the back of the fowl is maintained toward the divider partition as the fowl was initially placed on the shackles. . .”); Col. 8, lines 1- 4 (“Fig. 7 also illustrates another extremely important aspect of the invention whereby the back portions of the fowl are maintained in a predetermined position so as to receive the full force of the spray medium issued from the spray

nozzles. . ."); Col. 8, lines 13-15 ("The back of the fowl is directed toward the partition during its entire travel through the station."). Thus, Snowden is not properly combined with Dew, Ludwig or Janssen in an obviousness rejection.

The Examiner's Final Office Action points to the conclusory statement that "the overlapping sprays of the system tend to evenly wet birds" as teaching the limitation of the present invention which includes a uniform coating of marinade on a meat product. But this statement includes no teaching on how any uniformity is achieved and, indeed, Figure 17 of Snowden, relied upon by the Examiner, illustrates the non-uniformity of the amount of spray received. As shown there, a meat product making its way through the conveyor would receive higher concentrations of steam on its back and front than on its sides. (See Snowden, Fig. 17). This is consistent with the teachings cited above which require that the back of the bird remain directed toward the nozzles throughout the conveyor's path.

As neither Dew nor Ludwig nor Snowden nor Janssen, alone or in combination, teach or suggest a device as recited by Claim 30, Applicant respectfully requests that the Board reverse the Examiner's rejection of Claim 30.

Issue 2: Whether the Examiner erred in rejecting claims 63 and 72 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of Vincent (GB 2,177,585):

Applicant respectfully traverses the rejection of claims 63 and 72 under 35 U.S.C. § 103(a) as being unpatentable over Dew, Janssen, Ludwig and Snowden in view of Vincent. Because the combination of Dew, Janssen, Ludwig, Snowden and Vincent does not suggest a

device with the limitation “wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” as required by claim 30, claims 63 and 72, which depend from claim 30, are patentable over the combination of Dew, Janssen, Ludwig, Snowden and Vincent.

As discussed above, neither Dew, Janssen, Ludwig nor Snowden teach or suggest a device wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

Vincent does not cure the deficiency of Dew, Janssen, Ludwig and Snowden. The Examiner introduces Vincent to disclose the use of shielding means to shield selected portions of the meat product from being sprayed with marinade and the use of pressurized spraying of seasoning/flavoring in powder form onto the food product. *See* Final Office Action, page 6. The Examiner does not allege that Vincent discloses a device “wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” and Vincent contains no such disclosure. Therefore, applicant respectfully requests the Board reverse the Examiner’s rejection of claims 63 and 72.

Issue 3: Whether the Examiner erred in rejecting claims 64 and 65 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221), Janssen et al (WO/93/13671), Ludwig (U.S. Patent 5,449,524) and

**Snowden (U.S. 3,631,563) as applied to claim 30 and further in view of
Newman (U.S. 5,668,634) or Gori (U.S. Patent 4,413,279):**

Applicant respectfully traverses the rejection of claims 64 and 65 under 35 U.S.C. § 103(a) as being unpatentable over Dew, Janssen, Ludwig and Snowden in view of Newman or Gori. Because the combination of Dew, Janssen, Ludwig, Snowden and Newman or Gori does not suggest a device with the limitation “wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” as required by claim 30, claims 64 and 65, which depend from claim 30, are patentable over the combination of Dew, Janssen, Ludwig, Snowden and Newman or Gori.

As discussed above, neither Dew, Janssen, Ludwig nor Snowden teach or suggest a device wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

Neither Newman nor Gori cures the deficiency of Dew, Janssen, Ludwig and Snowden. The Examiner introduces Newman and Gori to disclose analyzing means in the form of a camera to establish the quality of a processed meat product. *See* Office Action, page 7. The Examiner does not allege that Newman or Gori disclose a device “wherein the marinade applications stations apply marinade onto the meat product conveyed by a conveyor device and rotated about a vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” and neither Newman nor Gori contain such a

disclosure. Therefore, applicant respectfully requests the Board reverse the Examiner's rejection of claims 64 and 65.

Issue 4: Whether the Examiner erred in rejecting claim 77 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524):

Applicant respectfully traverses the rejection of claim 77 under 35 U.S.C. § 103(a) as being unpatentable over Dew in view of Janssen and Ludwig. Because the combination of Dew, Janssen, and Ludwig, does not suggest a device with the limitation “wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” as required by claim 77, claim 77 is patentable over the combination of Dew, Janssen, and Ludwig.

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, “obviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). Moreover, as the Supreme Court recently stated, “*there must be some articulated reasoning* with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (emphasis added))

Neither Dew, Janssen, nor Ludwig teach or suggest a device wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the

conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

Dew teaches a method for processing food products by spraying them with atomized water in an electric field. If desired, the water can include additives to preserve, for example, the color or flavor of the food product. Dew refers to all sorts of food products. Col. 3, lines 45-61. In this respect Dew refers to all sorts of suitable means for conveying the food products in Col 5, lines 12-22. For poultry, Dew discloses that the food products are carried by shackles connected to a conveyor chain 4. Col. 5, lines 53-54. Although Dew suggests that “any type” of conveyor can be used, there is no teaching of a conveyor for holding a meat product which is rotatable about its vertical axis; nor is there teaching of a device wherein the meat product is rotated about the vertical axis by the meat product holder while marinade is being apply to allow the product to be *uniformly* coated with overlapping layers of different marinades. Rather, Dew discloses a device wherein the two sides of the meat product facing the spray likely receive a greater concentration of additives than those portions of the meat product positioned parallel to the sprays. Regardless, the device of Dew does not provide for the uniform coating of layers as recited by claim 30. Moreover, Dew does not disclose the use of marinade application stations positioned one behind another and the use of different marinades as recited by claim 30.

Ludwig teaches the needle injection of solutions into *different portions* of poultry carcasses carried by a transport belt. The portions of the carcass making contact with the belt are not, and indeed can not, be treated by the Ludwig device. Further, Ludwig teaches a device which requires *greater concentrations of injected solution in certain regions of the carcass and lesser concentrations of injected solution at other portions of the carcass*. Ludwig, Col. 2, lines 30-33.

It would not have been obvious to combine the Dew and Ludwig references as suggested by the Examiner. Ludwig is related solely to injecting a carcass with a solution whereas Dew is related to the application of a solution through spray. Ludwig teaches treatment of the interior of the carcass whereas Dew teaches treatment of the exterior. To one of ordinary skill in the art, these two techniques are totally distinct and techniques which, in fact, require distinct equipment. One of ordinary skill in the art considering Dew, and wishing to provide for the application of different marinades to the exterior of a carcass, would not look to Ludwig and its injection techniques. Even if Ludwig was in fact considered, however, one of ordinary skill certainly would not retain the sequential treatment with different marinade features of Ludwig and the application technique of Dew. A conclusion of obviousness based on the combination of Dew and Ludwig is only available when based on improper hindsight reasoning.

In addition, it would not have been obvious to combine the Dew and Ludwig references because the combination actually renders the prior art unsatisfactory for its intended purpose. *See* MPEP 2143.01. In order to modify Dew to render the claimed invention obvious, the nozzles of Dew would have to be placed in consecutive marinade applications stations wherein at least one of the marinades of the marinade stations differed from the rest of the stations. This would result in a carcass first being treated with a water spray containing one marinade and then treated with a water spray containing a different marinade. But the application of such water-based sprays in two consecutive steps would actually result in the removal of the first marinade spray by the application of the second. Thus, the combination of Dew and Ludwig would render at least Ludwig, which teaches the treatment of a carcass with different solutions (attainable in Ludwig through injection), unsuitable for its intended purpose.

Ludwig clearly teaches away from the instant invention wherein the meat product is rotated about the vertical axis by the meat product holder while marinade is being applied to allow the product to be uniformly coated with overlapping layers of different marinades. Rotation while applying marinade through injection is impossible. Again, Ludwig is not properly used combined with Dew in an obviousness rejection.

Janssen teaches the use of a carrier which is rotatable through a predetermined angle on a vertical axis. Page 5, lines 21-22. Nothing in Janssen discloses a carrier which is fully rotatable about its vertical axis, which rotation would be necessary in order to meet the limitation that the outer surface of meat products are “uniformly coat[ed]. . . with overlapping layers of different marinades.” Rather, Janssen teaches that the rotation of the carrier 6 is determined by the interaction between a segment of the Maltese Cross 18, and also by angular orientation fixing means present in the connecting means 8. Page 6, line 37- Page 7, line 8. Janssen does not include any teaching of marinade is being applied to allow the product to be uniformly coated with overlapping layers of different marinades.

As neither Dew nor Ludwig nor Janssen, alone or in combination, teach or suggest a device wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades, Applicant respectfully requests that the Board reverse the Examiner’s rejection of Claim 77.

Issue 5: Whether the Examiner erred in rejecting claim 78 under 35 U.S.C. 103(a) as being unpatentable over Dew (U.S. Patent 4,196,221) in view

**of Janssen et al (WO/93/13671) and Ludwig (U.S. Patent 5,449,524) as
applied to claim 77 and further in view of Vincent (GB 2,177,585):**

Applicant respectfully traverses the rejection of claim 78 under 35 U.S.C. § 103(a) as being unpatentable over Dew in view of Janssen and Ludwig and further in view of Vincent. Because the combination of Dew, Janssen, Ludwig, and Vincent does not suggest a device with the limitation “wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades” as required by claim 77, claim 78, which depends from claim 77, is patentable over the combination of Dew, Janssen, Ludwig, and Vincent.

As discussed above, neither Dew, Janssen, or Ludwig teach or suggest a device wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

Vincent does not cure the deficiency of Dew, Janssen, and Ludwig. The Examiner introduces Vincent to disclose pressurized spraying of seasoning/flavoring in powder form onto the food product. *See* Final Office Action, page 9. The Examiner does not allege that Vincent discloses a device “wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.” Therefore, applicant respectfully requests the Board reverse the Examiner’s rejection of claim 78.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "C. Hart", is written over a horizontal line.

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Appendix A – Claims on Appeal

30. (Rejected) A device for applying multiple coatings of different marinades in overlapping layers onto meat products comprising:

a. a conveyor device comprising a track and a plurality of meat product holders adapted to hold meat products, wherein the meat product holders are displaceable along the track to convey meat products and wherein each meat product holder comprises a rotary member adapted to rotate the meat product about a vertical axis;

b. a plurality of marinade application stations positioned one behind another along the track of the conveyor device, so that the meat products sequentially pass along the marinade application stations;

c. at least one of the marinade application stations adapted to apply a different marinade than the other marinade application stations;

d. at least one of the marinade application stations comprising at least one nozzle for emitting at least one jet of at least one marinade;

wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

63. (Rejected) The device of claim 30, wherein at least one marinade application station is adapted to coat only selected portions of the outer surface of the meat product with the at least one marinade and wherein the device further comprises shielding means to substantially shield non-selected portions of the outer surface of the meat product from the at least one marinade.

64. (Rejected) The device of claim 30, further comprising analyzing means to analyze the meat product after marinade coating and obtain a result, wherein the device is adapted to coat the meat product with additional marinade if the result is unsatisfactory.

65. (Rejected) The device of claim 64, wherein the analyzing means comprises a camera.

72. (Rejected) The device of claim 30, wherein the at least one marinade application station comprises means for generating a gas flow, the marinade including small particles entrained in the gas flow.

77. (Rejected) A device for applying multiple coatings of different marinades in overlapping layers onto meat products, the device comprising:

a. a conveyor device comprising a track and a plurality of meat product holders, each meat product holder adapted to hold one or more meat products suspended downwardly from the meat product holder, wherein each meat product holder is displaceable along the track to convey meat products, and wherein each meat product holder comprises a rotary member adapted to rotate the meat product about a vertical axis;

b. a plurality of marinade application stations positioned one behind another along the track of the conveyor device, so that the meat products sequentially pass along the marinade application stations;

c. at least one of the marinade application stations being associated with a different marinade than the other marinade application stations, wherein the marinade application stations are adapted to apply different marinades successively to the outer surface of the meat product; and

d. at least one of the marinade application stations comprising at least one nozzle for emitting at least one jet of at least one marinade;

wherein the marinade application stations are adapted to apply marinade onto a meat product conveyed by the conveyor device and rotated about the vertical axis by the meat product

holder to uniformly coat the outer surface of the meat product with overlapping layers of different marinades.

78. (Rejected) A device according to claim 77, wherein the at least one marinade application station includes means for generating a gas flow, the marinade including small particles entrained in the gas flow.

Appendix B – Evidence

None.

Appendix C – Related Proceedings

None.